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ABSTRACT

Despite the widespread prevalence of boredom in many societies and of boredom-related problems in education, industry, and mental health, little research has been done on this emotion and no empirical cross-cultural research could be found. A Boredom Proneness (BP) Scale was developed and administered to college students in Australia, Hong Kong, Lebanon, and the United States. A principal component analysis of the four samples revealed similar factor loadings and alpha coefficients. An analysis of variance among groups manifested a significant main effect of culture, an effect much larger than that for gender which was also significant. The Australian and American samples were similar in their boredom proneness levels. The Lebanese students, followed by the Hong Kong students reported the highest amounts of boredom proneness. Within all groups, males scored higher than females and significantly so with Americans and Australians. Fifteen "factorially transcultural" items were identified across samples. The results suggest that although boredom may exhibit many shared elements, culturally specific attitudes also exist. (Author)

BOREDOM PRONENESS IN YOUNG ADULTS: GENDER AND CULTURAL COMPARISONS

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Abstract: Despite the widespread prevalence of boredom in many societies and of boredom-related problems in education, industry, and mental health, little research has been done on this emotion and, to our knowledge, no empirical cross-cultural research. Using our recently developed Boredom Proneness (BP) Scale, we carried out studies in Australia, Hong Kong, Lebanon and the United States with college students. A principal component analysis of the four samples revealed similar factor loadings and alpha coefficients. An ANOVA among groups manifested a significant main effect of culture -- an effect much larger than that for gender, which was also significant. The Australian and American samples were similar in their BP levels. The Lebanese students, followed by the Hong Kong students reported the highest amount of boredom proneness. Within all groups males scored higher than females and significantly so with Americans and Australians. We identified 15 items that were "factorially transcultural" across samples. The results suggest that although boredom may exhibit many shared elements, culturally specific attitudes also exist. We speculate about the reasons for cultural and gender

differences and point to directions for further research.

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In various countries with an European heritage, boredom is often said to cause many socio-psychological problems. Examples include poor industrial production, labor turnover, absenteeism, dropping out of school, alcohol and drug abuse, vandalism, delinquency, low military morale, and problems of living in institutions such as prisons, mental hospitals and nursing homes. The so-called "housewife's neurosis" may be attributed to boredom. Despite these concerns, there have been few studies of boredom and few attempts to measure boredom and boredom proneness (Farmer & Sundberg, 1986; Smith, 1981).

For theoretical reasons, too, boredom is important for psychologists to understand. It needs to be fit into the conceptual framework of motivation and emotions. It is a concept, like stress, which could provide a useful connecting link between environmental characteristics and personal predispositions. Boredom seems to relate to psychological aspects of attention, arousal, information-processing and underload of stimulation. A concept antithetical to boredom is that of interest -- the extent and nature of being involved and committed to the endeavors of daily living. Boredom and interest are related to sense of time; one of the important features of the bored state is a feeling of slow passage of time in contrast to the forgetting of time when we are intensely interested in something.

Csikszentmihalyi (1975) theorizes that boredom should be compared with anxiety. He asserts that both are mismatches between environmental challenge and personal competence. Boredom occurs in situations in which a person's capabilities are greater than situational opportunities for expression, while anxiety comes when the environment demands more of the person that he or she is able to perform or give at the time. Other theoretical ideas needing exploration in relation to boredom include sensation-seeking (Zuckerman, 1979), locus of control (e.g. Lefcourt, 1982), attribution (Erkuts, 1983) and intrinsic vs. extrinsic motivation (Deci & Ryan, 1985b).

What are boredom and boredom proneness? Informally, everyone (at least in Western societies) seems to know what it is to be bored. Boredom is an internal state ranging from mild to severe unpleasantness. People describe boredom as a feeling of tedium, meaninglessness, emptiness, wearisomeness, and lack in interest or connection with the current environment. Proximal behavior often associated with the state of boredom includes yawning and signs of inattention and restlessness. Boredom proneness is a trait or predisposition to be bored -- a tendency to experience boredom in many situations and to have a general or frequent lack of sufficient interest in one's life. Distal behavior often associated with the trait of boredom proneness includes absentism, safety problems at work, and withdrawal or acts of rebellion in institutions. The most commonly used evidence of boredom and boredom-proneness, as with many internal characteristics such as depression

and anxiety, is from some form of self-report.

In our earlier study using a self-report scale and ratings (Farmer & Sundberg, 1986) we found evidence among American students that males may be more boredom-prone than females. Now the question is whether this finding will be confirmed in other cultures. After the results of this study, we will hypothesize about possible reasons for differences.

As far as we know, there have been no empirical cross-cultural studies of boredom or boredom proneness. (Izard, 1980, in his chapter in the Handbook of Cross-Cultural Psychology surveys cultural aspects of emotion but does not mention boredom.) There are many culture-person connections that might be related to boredom. On a more macro level one might hypothesize correlations with indexes of unemployment rates, alienation, urbanization, ascribed vs. achieved status, but these are beyond this paper. As the more direct level, culture might affect the sense of boredom through attitudes toward time and "filling time," discrepancies between expectations and actual opportunities for stimulation, discrepancies between cultural rules and boundaries for appropriate behavior and the individual's autonomous strivings and desires, and the customary language and labeling of living situations. Many of these culture-person influences suggest that industrialized, highly educated, more affluent societies are likely to exhibit more boredom. Boredom in Europe used to be called "the royal disease," but it has spread from nobility to the middle-class as the latter became wealthy. Collective and traditional

societies, as compared with individualistic, modern ones, would be presumed to be less likely to expect to have interesting and entertaining lifestyles. For this exploratory study, we anticipated that the American and Australian college students coming from affluent, industrialized societies would report more boredom-proneness than the Hong Kong and Lebanese students. However, we recognized that the latter subjects are not representative of their traditional cultural groups; they are likely to have many of the same material aspects of daily living that Australian and American students have. We did not arrive at simple predictions about cultural differences. It seemed best to let the data speak for themselves and then to hypothesize further.

METHODS

Boredom was assessed with the 28-item Boredom Proneness (BP) Scale (Farmer & Sundberg, 1986). The BP Scale contains a set of True-False items such as "It takes a lot of change and variety to keep me really happy" and "Time always seems to be passing slowly". Farmer and Sundberg (1986) report evidence of validity and an association with measures of depression, hopelessness, perceived effort, and loneliness among American students. The scale was correlated with two of the three motivational orientations comprising the General Causality Orientation Scale (Deci & Ryan, 1985a) -- negatively with the autonomy or intrinsic orientation, and positively with the impersonal orientation (feeling incapable or amotivated about reaching goals). The test-retest reliability of the BP scale after one week was .83,

and the alpha coefficient was .79.

The subjects for the present study were university undergraduates in psychology classes, aged around 19 or 20 years. In all four universities, the medium of instruction was English, and the original English instruments were used. Subjects with more than three items missing were removed from analyses.

RESULTS

The items of the BP scale are presented in Table 1, and the descriptive statistics for the 28-item scales are presented in Table 2, along with those for a 15-item scale. The later scale, which we tentatively call a Cross-Cultural Commonality (BP-CCC) scale, was derived through principal component analysis. Items that had a factor loading of + or - .20 on the first unrotated factor across all four culture groups were retained. This process resulted in the 15-item BP-CCC scale (items 1, 2, 3, 4, 5, 7, 8, 9, 10, 13, 14, 16, 19, 25, & 26). There was a strong correlation between the 28-item and 15-item scale (.91). The alpha coefficients of the items comprising the BP-CCC scale for the combined groups ranged from .70 to .76.

--------- Insert Table 1 and Table 2 about here ---------

An overall, two-way, ANOVA was performed with gender and country on the 28-item scale. Both main effects were significant: Gender [$F(1,566)=5.12$, p

<.05] and Culture [F(3,566)=16.2, p <.001]. Similar results were found with the 15-item scale; Gender [F(1,566) = 7.04, p <.01], Culture [F(3,566) = 14.26, p <.001]. There was no noticeable interaction between culture and gender on either form of the BP Scale. It is evident from these ANOVA's that the effect of culture was much larger than that of gender.

In all four countries the males reported higher levels of boredom proneness. A correlation matrix between the 28 items and gender revealed 11 out of 28 correlations to be significant (p <.05). A discriminant analysis on gender was subsequently performed and found to be significant (Wilk's Lambda = .90, p <.01).

As evident in Table 2, the highest BP score was from the Lebanese who were followed respectively by the Hong Kong, Australian, and American subjects. The Americans and Australians had remarkably similar scores and manifested the greatest gender differentiation; in both of these "Western" groups males scored significantly higher than did females.

Because of the consistent gender related difference, the data were analyzed separately for males and for females. Both the 15-item and 28-items scales were used in this analysis. No differences between the two sets of results were apparent. Table 3 presents the results from the Scheffe' tests of the between country analysis using the 15-item Scale.

------Insert Table 3 about here-----

With the female subjects, 4 out of the 6 t-tests were significant at the level of $p < .05$, but with the male sample no differences reached significance. For females the students seemed to be split into two groups which were significantly different between groups but not within the two-country groups. That is, the American and Australian women were similar to each other as were the two Asian female samples. American women showed statistically lower BP scores than Lebanese and Hong Kong women, and Australian women were also lower than Lebanese and Hong Kong women.

To examine the country differences in more detail, we carried out an item-by-item comparison between each of the four groups against the others using the Scheffe' test. We found many differences. In the discussion section we will discuss the seven items (Nos. 5, 8, 10, 11, 19, 22 and 28) on which both the Hong Kong and Lebanese students scored significantly more often in the bored direction than the American and/or Australian subjects. All the findings with particular items are shown in Table 4.

-------Insert Table 4 about here-----

DISCUSSION AND SPECULATIONS TOWARD FURTHER RESEARCH

In earlier work, Farmer and Sundberg (1986) found a moderate correlation

between boredom proneness and depressive tendencies. The finding that women (at least in Western cultures) are commonly found to have more depression than men (e. g. Amenson & Lewinsohn, 1981) would suggest that they might also show more boredom. The opposite was found, which suggests that boredom and depression are distinct emotions. Boredom, in lay usage, is often said to be related to external causes, whereas depression is readily seen as internal. Further research will need to clarify this alleged attributional or causal difference. The chances are that both depression and boredom result from an interaction between personal and situational factors, and it is possible that there are biological underpinnings for both.

Gender differences, though not as great as cultural differences, pose some interesting problems for interpretation. Why do all the male groups score higher than females (though not significantly in the Asian groups), and why are there fewer cultural differences within the male group than within the female group? The male claim for boredom proneness can be related to several ideas. For instance, in many cultures, males especially as adolescents and young adults as those in these samples, are supposed to be more active, searching and initiating, and thus more likely to judge situations as boring. (Activity level in young children shows a gender difference with boys being more active and exploratory.) Kerce (1988) found boredom to be common among military men of an age similar to our samples, particularly in repetitive, restrictive situations. Somewhat related to this line of thinking is that gender differences may be related to the finding

that men, relative to women, tend to inflate their abilities (Vollmer, 1984) Moreover, if they inflate abilities, men may come to believe that their work is not challenging enough and is boring (following Csikszentmihalyi, 1975). Another possible reason for gender differences is difference in attributional styles (Erkuts, 1983). Perhaps males are more likely to use "boredom" and females "depression" for self-attribution. It is likely that "boredom" implies relatively more blame to the environment and "depression" more blame to the self.

The two Asian female groups were much higher in boredom-proneness than the two "Western" female groups. This finding may be related to the modernization in these Asian countries, where wealthy and educated families want their girls to have higher education but still place strong traditional restrictions on them. Asian females may be very conscious of limitations on their activities.

Cultural differences on boredom are somewhat surprising. We did not expect that Americans and Australians would evidence less boredom-proneness than Lebanese and Hong Kong students. Assuming that the BP scale does effectively measure differences in boredom proneness in these populations, what may account for the significant differences?

Boredom may relate to a perception of relative deprivation. In Asia as in many parts of the world, popular cinema and television present American

and Western wealth and life-styles which are less attainable elsewhere. These may help create a sense of deprivation and frustration with one's own situation; if so, Asian students might be more willing to answer in the bored direction. For the students in Beirut in 1983 (when the data were obtained at the American University of Beirut), there was not only this deprivation but also the terrible threats to security which they had experienced for the many years of the civil war. They could not travel as they would like; they could not even take a picnic in the countryside if they wished. As educated, urban-dwelling young people, they knew what life could potentially bring them and what they would like to do, but they were caught in a very restrictive situation. Likewise the Hong Kong students have an educated, urban experience and know about Western lifestyles, but they too are hemmed in by the restrictions on travel inherent in a small geographical area.

Somewhat related to this is the reasoning that Hong Kong and Lebanon still have considerable restriction on young people due to traditional life styles. They may feel the traditions are no longer meaningful but trap them in situations they want to leave. If so, well educated, Western-oriented college students may be more ready to see their lives as restricted and boring. This may be true particularly of Lebanese young women exposed to the traditional sexism of Arab culture. Another way to think of this problem is to see it as a conflict between personal desire and societal rules or preferences for learning by experiencing (desire) or by accepting rules imparted by society. Western societies may be less rule-governed.

In the midst of war, Lebanese students may also perceive a certain lack of importance and meaningfulness in college studies; this may help explain their high level of boredom-proneness. Schoolwork may seem "very tame" and boring, and, given the internal war conditions, there were serious questions about the meaningfulness and usefulness of obtaining a college degree in Lebanon. For different reasons, the Hong Hong students (tested in 1984) may also have questions about their futures; concerns were frequently expressed about the coming annexation to the Peoples Republic of China in 1997.

A post-hoc analysis of BP items significantly differentiating the four groups revealed many differences. The sense of environmental restriction seems to be revealed by the items on which both Hong Kong and Lebanese students were higher than Australians and Americans. The content of most of these items suggested either perceived problems with situational opportunities or a sense of personal passive inability to generate an exciting life, e. g. answering true to "I am often trapped in situations where I have meaningless things to do," or false to "I find it easy to entertain myself." Further research exploration of the restriction hypothesis need to be carried out.

Commonality and differentiation are basic considerations in cross-cultural comparisons. These can be explored on the item level or the factor level. It is interesting that nearly half (12) of the items showed no

sigificant differences between any of the groups, and it was possible to find similar factors within all four groups (the 15 item BP-CCC scale). Roughly half of these items can be related to commonality. As the same time, about half of the items differentiated between two or more groups.

Further cross-cultural study of boredom should investigate situations in which people are bored and how they cope with boredom in various ways. It would be good to sample a variety of ages, educational level and cultures. The BP scale should be carefully translated. It is possible that a study of the language of emotional expression in other cultures would be helpful: Are there equivalent words for boredom? Are they known and used as frequently as in the West?**

More research needs to explore hypotheses from a conceptual network of boredom in relation to other emotions, physiological conditions and social settings. The definition of kinds of boredom needs to be specified. Sometimes, we make the distinction between restless, listless, and covered-up boredom. Some writers (e.g. Healy, 1984) distinguish between the common problem of boredom in person-environment relations and the more serious problem of existential hyperboredom deriving from the personal sense of the meaninglessness of life.

The findings, if replicated, suggest that universities in Asia may have difficulties with boredom in students. Perhaps universally, the statement by

Friedrich Nietzsche (quoted in Healy, 1984, p. 118) applied: "What is the task of all higher education? To make a machine of man. What are the means to this end? The student must learn to be bored." To promote the best development of students, we need to find out more about what is exciting learning to different groups and individuals. We need to locate and help develop the interests of students and to place studies in the context of the long-term value of a career and life-style. If intrinsic motivation is important for an educated adult, then greater understanding of how to foster that is needed; usually this means discovering and building on existing predispositions. Students often say certain studies or lecturers are boring, but there may be many reasons for this report. A more careful diagnosis of the problem is needed -- both internal conditions of the student (such as lack of sleep) and external factors. This commonly accepted label, boredom, suggests a deeper problems of "connection."

Within each culture, connections between the young and society and expectations about the future will take somewhat different forms and definitions (Sundberg & Tyler, 1970; Sundberg, Tyler & Poole, 1983; Tyler, Sundberg, Rohila & Greene, 1968). The BP scale might be studied developmentally with school age children and used to detect potential problems in schools. In this study in four countries, people were in an important life transition. For those selected people attending universities, society needs to provide opportunities for achieving as high a level of potential as possible. The large question is whether a bored time in the

university works against that goal, and if so, how do we help promote an interested, self-fulfilling, community-related personhood.

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** With regard to language, it is probable that the labeling of boredom is more common in Western or European cultures than in others and may be a fairly recent phenomenon historically (Healy, 1984). The English "boredom," French "ennui," and German "Langeweile" are found in literary works only in the late 18th century. Have Asian languages have developed different distinctions about emotions and less variety of emotional words? There are Asian words for bored and boredom (e.g.,the Chinese "wuliau," Hindi "khaali," Indonesian "bosan" and "kebosanan", and Thai "na buwa" and "kwam buwa"), but the degree with which those words are in common usage and thought is yet to be determined. Is there less of a predisposition among Asians to self-ascription the state of boredom in their indigenous languages? Informal interviews suggest that the sectors of Asian societies that use the word "boredom" tend to be the middle or upper classes; the poor may be too busy trying to survive, some informants point out.

Table 1
Boredom Proneness Scale*^

^ 1. It is easy for me to concentrate on my activities. (F)
^ 2. Frequently when I am working I find myself worrying about other things. (T)
^ 3. Time always seems to be passing slowly. (T)
^ 4. I often find myself at "loose ends", not knowing what to do. (T)
^ 5. I am often trapped in situations where I have meaningless things to do. (T)
6. Having to look at someone's home movies or travel slides bores me tremendously. (T)
^ 7. I have projects in my mind all the time, things to do (F)
^ 8. I find it easy to entertain myself (F)
^ 9. Many of the things I do are repetitive and monotonous. (T)
^10. It takes more stimulation to get me going than most people. (T)
11. I get a kick out of most things I do. (F)
12. I am seldom excited about my work. (T)
^13. In any situation I can usually find something to do or see to keep me interested. (F)
^14. Much of the time I just sit around doing nothing. (T)
15. I am good at waiting patiently. (F)
^16. I often find myself with nothing to do--time on my hands. (T)
17. In situations in which I have to wait, such as a line or a queue, I get very restless. (T)
18. I often wakeup with a new idea. (F)
^19. It would be hard for me to find a job that would be exciting enough. (T)
20. I would like more challenging things to do in life. (T)
21. I feel that I am working below my abilities most of the time. (T)
22. Many people would say that I am a creative or imaginative person. (F)
23. I have so many interests, I don't have time to do everything. (F)
24. Among my friends, I am the one who keeps doing something the longest. (F)
^25. Unless I am doing something exciting, even dangerous, I feel half-dead and dull. (T)
^26. It takes a lot of change and variety to keep me really happy. (T)
27. It seems that the same things are on television or the movies all the time; it's getting old. (T)
28. When I was young, I was often in monotonous and tiresome situations. (T)

* When administering the scale to subjects, the title used is "Experience of Activities," not "Boredom Proneness."

^ This marks the 15 items of the BP-CCC (Cross-Cultural Commonality) scale.

Table 2
Scores on the 28-item and 15-item BP Scale

	Hong Kong	Lebanon	United States	Australia
Males				
N	(34)	(46)	(97)	(55)
28-item				
(Mean)	12.56	13.26	10.40	10.73
(SD)	4.79	4.58	4.83	5.27
15-item				
(Mean)	5.53	6.20	4.73	5.07
(SD)	3.41	3.34	2.95	3.41
Females				
N	(61)	(37)	(148)	(96)
28-item				
(Mean)	12.18	13.19	9.26	9.39
(SD)	4.01	4.08	4.68	4.69
15-item				
(Mean)	5.36	6.00	3.82	3.55
(SD)	2.98	2.98	2.93	2.83

Table 3
Gender Comparisons for each Culture on the 15-item BP-CCC Scale

	Males	Females
United States w Lebanon	2.54	4.00*
Hong Kong w Lebanon	0.87	0.31
Australia w Lebanon	1.66	4.30*
Australia w Hong Kong	0.61	3.78*
United States w Hong Kong	1.21	3.42*
United States w Australia	0.62	0.71

* $p < .05$ with Sheffe' post-hoc comparison

Table 4
Mean Item Scores on the 28-item BP Scale#
(0 = true, 1 = false)

Items	United States	Lebanon	Hong Kong	Australia
1	.40	.37	.49	.45
2	.71	.65	.66	.64
3	.10	.06	.06	.06
4	.29	.37	.46 >AA	.21
5	.31	.59 >Am,H	.52 >Am	.35
6	.23	.47 >Am,H	.21	.35
7	.20	.14	.28	.21
8	.19	.43 >AA,	.31 >Au	.13
9	.45	.55	.37	.44
10	.23	.42 >Au,H	.37 >Au	.18
11	.31	.64 >AA	.79 >AA	.36
12	.31	.52 >Am,H	.29	.34
13	.22	.36	.34	.25
14	.13	.24	.25	.15
15	.63	.66	.54	.62
16	.13	.36 >AA,H	.15	.13
17	.58	.71 >H	.45	.54
18	.48	.36	.73 >AA,L	.52
19	.28	.49 >AA	.51 >AA	.29
20	.64	.84 >AA	.79	.64
21	.54	.61	.62	.52
22	.27	.49 >AA	.60 >AA	.31
23	.38	.31	.36	.30
24	.51	.60	.62	.59
25	.17	.35 >Am	.20	.20
26	.37	.61 >AA	.44	.41
27	.49	.58	.59	.43
28	.15	.31 >Am	.29 >Am	.23

-- All groups were compared on each item using Scheffe's test. A "greater than" sign (>) after an item mean indicates that subjects in the given sample were significantly higher at the .01 probability level than the indicated others: Americans (Am), Australians (Au), both Americans and Australians (AA), Hong Kongers (H) or Lebanese (L).